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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/091,797

03/06/2002

Barry Fruchtman

IBM 0116

8935

7590

07/25/2006

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EXAMINER

TODD, GREGORY G

ART UNIT

PAPER NUMBER

2157

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/091,797	FRUCHTMAN ET AL.	
	Examiner	Art Unit	
	Gregory G. Todd	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All . b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is in response to applicant's amendment filed 04 May 2006, of application filed, with the above serial number, on 06 March 2002 in which claims 1, 5, 7-8, 10-13, 15, 17-18, and 20 have been amended and claims 4 and 14 have been cancelled. Claims 1-3, 5-13, and 15-20 are therefore pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 8-16, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Dunham et al (hereinafter "Dunham", 6,714,952).

As to claim 1, Dunham teaches a method of restoring data in a computer network system wherein a plurality of client systems have access to a storage pool coupled to an associated storage area network (SAN) (at least col. 3 line 66 - col. 4 line 11) comprising the steps of:

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requesting a restore wherein each of said plurality of client systems may participate in said restore (at least col. 10, lines 11-27; receiving request for data to be restored); and

coordinating restoration of data stored in said storage pool using a storage management server that constructs a master restore table comprising a plurality of data portions to be restored and an associated location of said plurality of data portions in said storage pool (at least col. 4, lines 1-11; col. 5 line 26- col. 6 line 34; catalogue having information on data stored in backup storage devices and backup/restore server), tracks said plurality of data portions of said data as restored by said plurality of client systems, and blocks access to each of said plurality of data portions that have been restored by one of said plurality of client systems to avoid duplicative restoration efforts (at least col. 10, lines 11-59; col. 5, lines 63-67; determining appropriate data to be restored according to system/ metadata/ catalogue, and cleaning up/ de-allocation).

As per Claim 2, wherein said coordinating access step occurs during a plurality of sessions (at least col. 8, lines 10-33; eg. file-by-file basis).

As per Claim 3, wherein said coordinating access step is interruptible (at least col. 8, lines 10-33; col. 5, lines 35-42; eg. file-by-file basis/ scheduler).

As per Claim 5, wherein said storage pool comprises a plurality of storage devices and said associated location of said data portions includes a location in one of said storage devices (at least col. 4, lines 1-11; Fig. 1).

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As per Claim 6, wherein said data portions are provided concurrently from said plurality of storage devices to a target restoration device (at least Fig. 1; col. 4, lines 1-11; eg. central backup/restore server through which all data goes).

As per Claim 8, wherein said master restore table is identified by an associated token and a client system participating in a restore gains access to said master restore table by use of said token (at least col. 5 line 63 - col. 6 line 11).

As per Claim 9, deleting master restore table after restoration of a target restoration device is complete (at least col. 10, lines 55-59).

As per Claim 10, wherein said constructing step further comprises automatically partitioning said plurality of data portions in said master restore table based on said associated location of said plurality of data portions in said storage pool (at least col. 4, lines 1-64; col. 5 line 35 - col. 6 line 34).

As per Claim 11, wherein said coordinating access step occurs before said master restore table is fully constructed (at least col. 4, lines 1-64; col. 5 line 35 - col. 6 line 34).

As per Claim 12. The method of claim 4, wherein said master restore table is saved in a storage management server, said storage management server coupled to said SAN (at least col. 3 line 66 - col. 4 line 11).

Claims 13, 15-16 and 18-20 do not add or define any additional limitations over claims 1-3, 5-6 and 8-12 and therefore are rejected for similar reasons.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunham et al (hereinafter "Dunham", 6,714,952) in view of Derek Gamradt, "Backup without disruption: LAN-free, server-free SAN backup avoids disrupting business", (hereinafter "Gamradt").

Dunham doesn't explicitly teach "a LAN-free path or a server-free path". However, Gamradt teaches LAN-free, server-free SAN backup avoids disrupting business. Gamradt does teach data representative of a LAN-free path or a server-free path from a client to a storage pool (pages 1-5). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify Dunham by having master restore table comprising data representative of a LAN-free path or a server-free path from a client to storage pool since doing so would allow data transferring between a client and storage pool without hindering LAN performance and without affecting standard network operations, as Gamradt teaches improving overall LAN performance, reducing administration costs, and enhancing the storage processes.

Response to Arguments

6. Applicant's arguments filed 04 May 2006 have been fully considered but they are not persuasive. Applicants argue, in substance, that Dunham fails to teach a storage management server coordinating the restoration of data by a plurality of client systems using a master restore table and blocking access to restored data portions.

However, Dunham clearly teaches the limitation as Dunham teaches a *single* backup/restore server (storage management server) which coordinates all backups and restores of the client systems (at least col. 4, lines 1-11; col. 5 line 26- col. 6 line 34), wherein a catalogue having information on data stored in backup storage devices and backup/restore server associated with metadata for all of the files. Dunham goes on that the data is backed up and associated with at least one metadata file, and respectively restored, thereafter a clean up process is performed, and thus avoiding duplicative backup efforts as well as duplicative restoration efforts, as the single server stores all information in a master catalogue and is 'cleaned up', thus eliminating any chance of duplicative files.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Newly cited Cane et al and Sutton et al, in addition to previously cited Arakawa et al, Gill et al, Fletcher et al, Yao et al, and Kopper are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G. Todd whose telephone number is (571)272-4011. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm w/ first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory Todd

Patent Examiner

Technology Center 2100


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